

**BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO**

IN THE MATTER OF APPLICATION)	
FOR TRANSFER NO. 5639 IN THE)	
NAME OF K & W DAIRY)	SECOND PRELIMINARY
_____)	ORDER ON REMAND

On June 21, 2002, the Hearing Officer for the Idaho Department of Water Resources ("Department" or "IDWR") issued a Preliminary Order on Remand denying the above captioned application due to the failure of K&W Dairy ("applicant") to meet its burden as set out by the district court for satisfying the local public interest standard. The applicant appealed the Preliminary Order to the Director. In addition, the applicant requested that the Director grant a stay of the proceedings to provide it further opportunity to submit detailed information for evaluation of the odor control measures for the dairy facility. On December 16, 2002, the Director granted the requested stay and motion to supplement the record. The Director remanded the matter to the Hearing Officer for further hearing relative to the adequacy of proposed odor control measures for the dairy facility. On May 20, 2003, the Hearing Officer conducted an additional hearing.

During the hearing, the protestant moved to strike certain portions of Applicant's Exhibits 21 and 23. The Hearing Officer took the motion under advisement stating that the motion would be addressed in this Second Preliminary Order on Remand.

Based upon the evidence presented in this matter and the Hearing Officer's understanding of the law, the Hearing Officer enters the following Findings of Fact, Conclusions of Law and Second Preliminary Order On Remand:

FINDINGS OF FACT

1. The Snake River Basin Adjudication ("SRBA") District Court has issued partial decrees for the following ground water rights to be used for irrigation from April 1 to October 31 each year:

<u>Ident. No.</u>	<u>Priority</u>	<u>Rate</u>
36-02087A	01-23-50	4.31 cfs
36-02113A	03-12-51	2.23
36-02161A	01-11-52	1.31
36-02289D	12-02-55	0.36

36-02311A	11-23-56	2.68
36-02500A	07-18-61	1.78
36-02614A	06-07-65	3.66
36-07307A	02-26-73	2.78
36-07362A	08-02-73	4.45
36-07477A	05-28-75	1.43
36-07606A	02-04-76	1.34
36-07779A	02-22-78	4.19
36-07832A	12-11-78	0.36
36-10225A	05-01-85	1.27
36-15169A	12-11-69	12.46

Limited to: 42.52 cfs

2. On August 31, 2000, K&W Dairy ("applicant") filed Application for Transfer No. 5639 ("application") with the Department proposing to change the point of diversion, nature of use, period of use and place of use of portions of the above listed water rights. The parts of the rights sought to be transferred are as follows:

<u>Ident. No.</u>	<u>Priority</u>	<u>Rate</u>
36-02087	01-23-50	0.19 cfs
36-02113	03-12-51	0.10
36-02161	01-11-52	0.06
36-02289	12-02-55	0.02
36-02311	11-23-56	0.12
36-02500	07-18-61	0.08
36-02614	06-07-65	0.16
36-07307	02-26-73	0.13
36-07362	08-02-73	0.20
36-07477	05-28-75	0.06
36-07606	02-04-76	0.06
36-07779	02-22-78	0.19
36-07832	12-11-78	0.02
36-10225	05-01-85	0.06
36-15169	12-11-69	0.56

Limited to: 1.92 cfs

The water rights involved in the application are a proportionate share of the rights appurtenant to land that the applicant has purchased.

3. The application proposes to change 1.92 cfs and 295.2 AF of the rights shown in Finding of Fact No. 1 to year-round stockwater and commercial use to be diverted from four (4) wells located in the SE1/4NE1/4 Section 32, T8S, R15E, B.M., Gooding County, for use at a proposed dairy in the NE1/4 Section 32, T8S, R15E, B.M.

The applicant proposes to dry up approximately 98.4 acres in the NE 1/4 to construct the dairy site for 5,750 milking cows and 840 non-milking cattle.

(Note: The "1/4" designations will be omitted from subsequent legal descriptions in this order).

4. The Department published notice of the application that was subsequently protested by Lee Halper and Bill Chisholm.

5. Issues identified by the protestants are as follows:

- a. The proposed changes will injure other water rights.
- b. The proposed changes will constitute an enlargement in use of the original right.
- c. The proposed changes are not in the local public interest.
- d. The proposed changes are not consistent with the conservation of water resources within the state of Idaho.

6. Exhibits premarked, offered or accepted as a part of the record are as follows:

APPLICANT'S

- Exhibit 1 - Vicinity Map of K & W Dairy
- Exhibit 2 - Vicinity Map of K & W Dairy (Enlargement of Applicant's Exhibit 1)
- Exhibit 3 - Well Interference Analysis
- Exhibit 4 - Water Use Worksheet
- Exhibit 5 - Analysis of Water Right Transfer to Dairy
- Exhibit 6 - Analysis of Nutrient Management Practices
- Exhibit 7 - NRCS Soils Data and Soils Maps
- Exhibit 8 - Copy of letter dated June 13, 2000 to Robert E. Williams from Ronald L. Belliston
- Exhibit 9 - Gooding County New CAFO Siting Permit
- Exhibit 10 - Letter dated June 14, 2000 from Larson Magic Farms
- Exhibit 11 - Letter dated June 14, 2000 from Chris Pratt
- Exhibit 12 - Aerial Map of Dairy Site and Surrounding Area (small map and larger map of same area)
- Exhibit 13 - Schematic - Liquid Waste Handling Map - Boer Dairy
- Exhibit 14 - Boer - Niagra Dairy System Comparison
- Exhibit 15 - Letter dated December 21, 2001 to Adrian Boer from Marv Patten together with a list of odor nuisance complaints in Gooding and Jerome Counties for 1999, 2000 and 2001
- Exhibit 16 - NOT OFFERED
- Exhibit 17 - House Bill No. 726
- Exhibit 18 - IDAPA 02.04.16 - Rules Governing Agricultural Odor Management
- Exhibit 19 - Natural Resources Conservation Service Conservation Practice

Standard - Nutrient Management Code 590; NRCS Conservation Practice
Standard - Composting Facility Code 317; ASAE EP379.2 Nov 97 -
Control of Manure Odors
Exhibit 20 - Wind Direction Data - Jerome Golf Club
Exhibit 21 - Manure Management Plan prepared by Macedo Mitchell Engineering
dated January 6, 2003, with accompanying appendices
Exhibit 22 - Letter dated January 8, 2003 to "To Whom it May Concern" from
Marv Patten
Exhibit 23 - Affidavit of Travis Kator dated January 13, 2003
Exhibit 24 - Affidavit of Adrian Boer dated January 13, 2003
Exhibit 25 - Letter dated January 15, 2003 to Adrian, Ken and Kevin Boer from
Dr. Ron E. Sheffield
Exhibit 26 - Deposition of Victor H. Hill dated May 16, 2003
Exhibit 27 - Summary of work experience for Victor H. Hill

PROTESTANT'S

Exhibit A - Draft Report titled Cumulative Impacts Assessment, Box Canyon Area
of the Eastern Snake River Plain, Idaho prepared by Idaho Division of
Environmental Quality - June 2000
Exhibit B - Literature Review of the Health Effects Associated with the Inhalation
of Hydrogen Sulfide, Idaho Department of Environmental Quality, by Pat
McGavran, June 19, 2001
Exhibit C - NOT ADMITTED
Exhibit D - NOT ADMITTED
Exhibit E - NOT ADMITTED
Exhibit F - NOT ADMITTED
Exhibit G - NOT ADMITTED
Exhibit H - Large Map - Magic Valley Dairies active on 5-22-01, Idaho
Department of Agriculture
Exhibit I - USGS Quadrangle Sheets showing Gooding County CAFO
Registration information
Exhibit J - Part of Gooding County Ordinance No. 70 - (2 pages)
Exhibit K - 2001 CAFO Registrations
Exhibit L - NOT OFFERED
Exhibit M - Minimum Risk Levels (MRLs) for Hazardous Substances - ATSDR
Exhibit N - NOT ADMITTED
Exhibit O - NOT ADMITTED
Exhibit P - NOT ADMITTED
Exhibit Q - NOT ADMITTED
Exhibit R - NOT ADMITTED
Exhibit S - Treasure Valley Air Quality Issues by Department of Environmental
Quality dated February 10, 2003
Exhibit T - 2001 CAFO Registrations
Exhibit U - NOT OFFERED
Exhibit V - Times News article by Nate Johnson

Exhibit W - NOT OFFERED
Exhibit X - NOT OFFERED
Exhibit Y - NUMBER NOT USED
Exhibit Z - Air Emissions from Animal Feeding Operations
Exhibit AA - NOT OFFERED
Exhibit AB - NOT OFFERED
Exhibit AC - NOT OFFERED
Exhibit AD - NUMBER NOT USED
Exhibit AE - Addendum to Victor H. Hill Deposition

7. The applicant owns about 1,100 acres located approximately 11 miles west and 1 mile south of Jerome where the new dairy is proposed. The southwestern corner of the property is located about 1/8 of a mile from the rim of the Snake River canyon and the site for the dairy is located about 1 mile north of the canyon rim.

8. The applicant operates two other dairies in Magic Valley, one with 1,150 cows and the other with 950 cows.

9. Tremblay Consulting of Jerome, Idaho prepared a Nutrient Management Plan for the proposed dairy utilizing a "flush system" of waste removal, which plan has been approved by the Idaho Department of Agriculture (See Applicant's Exhibit 6). The applicant, however, intends to revise the Nutrient Management Plan to utilize a "scrape system" for removal of dairy waste from the holding pens and alleys.

10. To control odor from the proposed dairy, the applicant proposes to compost solid waste in order to keep the bacterial action on the solid waste aerobic. The compost sites are planned at the dairy site and at another site about 4 miles east of the dairy site on land owned by the applicant. The applicant plans to land-apply liquid waste during the summer months using drop hoses and low pressure sprinkler nozzles, emptying the lagoon at least every week to prevent the generation of odors through anaerobic bacterial action and to store the liquid waste during the winter while the land is frozen. The proposed pivot location for land application of the waste is within the NW1/4 and SE1/4 of Section 32 and SW1/4 Section 33, T8S, R15E, B.M.

11. The applicant has developed a Manure Management Plan together with a Vicinity Plan and a Site Plan ("plans") and has submitted the plans to the Idaho Department of Agriculture for review and comment even though the plans are not required for the operation of the proposed dairy. (See Applicant's Exhibit 21). The applicant also has submitted the plans to the Waste Management Engineer of the Cooperative Extension System of the University of Idaho for review and comment. The plans include scraping manure from alleyways and open lots to a collection point from where the manure and all solids generated will be conveyed to screw-press separators to obtain optimal moisture content for composting of solids. The moisture from the manure will be piped to concrete gravity separators before entering the storage pond.

The liquid in the storage pond will be applied to lands of the applicant in accordance with the Nutrient Management Plan for the facility. The water to be land applied is proposed as a mix of 1 part lagoon water and 9 parts irrigation water.

12. On October 1, 1999, the Gooding County Planning and Zoning Commission approved a New CAFO Siting Permit for 6,600 animal units at the proposed dairy site. (See Applicant's Exhibit 9).

13. Testimony conflicted on the direction the wind blows in the vicinity of the proposed dairy, but most witnesses testified that the wind sometimes blows from any direction. In addition, colder air tends to sink into the Snake River canyon together with odors that may be in the sinking air.

14. About 90 percent of the feed needed for the dairy cattle will be purchased locally. Annual expenses associated with the dairy are estimated to be in excess of \$15 million, generating about \$92 million dollars of economic activity in the area.

15. The site will be graded and berms will be constructed to prevent wastewater from entering a canal owned by Northside Canal Company, which crosses the southern part of the applicant's property.

16. The applicant plans to dispose of liquid waste and most of the composted solid waste on the dairy site.

17. The applicant proposes to conserve water by using the same water for cooling, stockwater, and for washdown water in the milking parlor of the new dairy.

18. The rate of diversion, consumptive use and total volume of water diverted under Transfer No. 5639 will not be larger after the transfer than before the transfer. (See Applicant's Exhibit 5).

19. The applicant proposes to cease using ground water for irrigation on 98.4 acres located as follows:

T8S, R15E, B.M., Section 32		
NENE	-	9.2 acres
NWNE	-	9.2 acres
SWNE	-	40.0 acres
SENE	-	<u>40.0 acres</u>
TOTAL	-	98.4 acres

20. Using an average annual pumping rate of 0.41 cfs, which is the continuous diversion rate to provide the required annual volume of water for Transfer No. 5639, and a pumping period of 80 days, the estimated drawdown in a well 1/4 mile

distant from the dairy wells is 0.07 feet. Using a maximum pumping rate of 1.92 cfs for 80 days, the estimated drawdown in a well 1/4 mile distant from the dairy wells is 0.34 feet. (See Applicant's Exhibit 3).

21. There are two monitoring wells in the vicinity of the K & W Dairy. One well monitored as part of the INEEL Oversight Program is located about 2 miles southwest of the dairy site and shows the following nitrate concentrations: 1.7 mg/l (1989), 1.6 mg/l (1990), 1.9 mg/l (1996) and 1.8 mg/l (2000). The other well monitored as part of the Statewide Program is located about 2 miles easterly of the dairy site and shows the following nitrate concentrations: 1.8 mg/l (1991), 2.1 mg/l (1995), and 2.5 mg/l (1999).

22. Marv Patten, Dairy Bureau Chief with the Idaho Department of Agriculture testified that waste lagoons are the biggest source of odor complaints made to the Department of Agriculture and that land application of liquid waste from lagoons without dilution of the liquid waste is the second biggest source of complaints. He stated that the dairy facilities most complained about are the "flush type" liquid waste facilities.

23. Dr. Ron Sheffield, Waste Management Engineer with the University of Idaho Cooperative Extension Service assessed the manure management plan and odor control strategy of the applicant as "comprehensive" and a "well thought out strategy" of how to handle manure and to address potential odor problems. He described the plan as flexible in terms of options and allowing for future modifications that could be accomplished without major retrofits or capital expense. (See Applicant's Exhibit 25). He testified that if the applicant follows the plans, there would be an "earthy" smell from the manure but not the "septic/rotten egg" smell associated with hydrogen sulfide and other reduced sulphur compounds.

24. The protestants are concerned about the cumulative impact of dairies in the general vicinity of the applicant's dairy and believe there is a potential for the dairy operations to adversely affect water quality, air quality and the overall environment. The protestants believe the application is not in the local public interest, since the dairy will add to the alleged existing odor problem in the area.

25. The hearing record shows that the proposal of the applicant will enhance the economy of the area by creating jobs and generating economic activity through the purchase of cattle feed and other needs of the dairy.

26. The hearing record contains substantial evidence to show that the proposal of the applicant, will not injure other water rights, will not enlarge the use of water, and is consistent with the conservation of water resources within the state of Idaho.

27. Several homeowners who live near the Clear Lakes Country Club located approximately 3.5 miles southwesterly from the proposed dairy site described that odors from existing dairies in the area decrease their quality of life, especially when the wind is relatively calm during summer afternoons and evenings and limit outdoor activities. The

homeowners described that intolerable smells occur from 1 to 2 times a week. The homeowners also stated that real estate activity and sales of homes and property in the Clear Lakes Country Club area was slow and was directly related to objectionable odors from dairies in the area. Steve Katz, president of the Buhl Chamber of Commerce and president of the Rural Magic Valley Economic Development Association, representing 3 counties and 13 cities, testified that economic development activities, such as attracting new business ventures to the area, are adversely affected by dairy odors which have become increasingly more noticeable each year. He specifically stated that he did not drive prospective business representatives down Bob Barton Road because of undesirable dairy odors.

28. There presently are about 97,000 dairy cattle in Gooding County with about 72,000 being located within an approximate 5-mile radius north of the applicant's proposed dairy site. This general area also was described in the hearing as a triangular area beginning along the Niagara-Wendell road to Wendell, then to Hagerman and then south along the Snake River to the Niagara-Wendell road. (See Protestant's Exhibit I).

29. Witness David Erickson testified that within the Snake River canyon located just one mile south of the proposed dairy is a reach of public access to the canyon ("reach") that begins at Clear Lakes and extends upstream more than 6 miles. He testified that the reach is probably the best public access to the canyon from Hagerman to Burley being a distance of about 70 river miles. The reach is used for upland bird hunting, waterfowl hunting, hiking, photography and wildlife viewing. An existing equestrian trail extends through most of the reach that also includes the Magic Springs Wildlife Management Area and Niagara Springs State Park. Part of the proposed dairy site is located as close as 1/2 mile north of the reach and is about midway through the reach. He described that existing dairy odors came from the north toward the Snake River canyon and that he first started noticing odors in the early 1990's.

30. Protestant Bill Chisholm lives about 7 miles west of the proposed dairy site and testified that existing dairy odors near the Bob Barton Highway located along the north boundary of the proposed dairy site are so bad that he drives an alternate route from his home to Wendell. The thrust of his testimony was that proposed projects should not be considered without consideration of the "cumulative impact" an additional dairy may have on the odors in a given area. When asked "Is there anything this applicant can do with his proposal to improve the management thereof that would satisfy you?" protestant Chisholm said "No." Chisholm's position was that "Any additional dairy in Magic Valley has to be turned down."

ANALYSIS

The Preliminary Order on Remand issued by the Hearing Officer on June 21, 2002, denied the application because the applicant did not provide technical information

or a design for review and analysis to determine whether odor control measures proposed for the dairy likely would be successful enough to satisfy the local public interest standard.

At the hearing held on May 20, 2003, the applicant did provide technical information and a design for odor control measures at its proposed dairy. The information submitted was sufficient to allow the Hearing Officer to assess the adequacy of the odor control measures proposed by the applicant. The design of the measures have been assessed by Dr. Sheffield as “comprehensive,” and as a “well thought out strategy” of how to handle manure and to address potential odor problems. The plan was further described by Dr. Sheffield as flexible in terms of options and allows for future modifications that could be accomplished without major retrofits or capital expense. The plan is one of about 5 such plans that have been proposed so far in Idaho and is similar to the design and technology offered in Transfer 69754 in the name of Harvey Quesnell Ranches, Inc. that was approved by the Department in February 2003.

The basis for the protestant Bill Chisholm’s motion to strike portions of Applicant’s Exhibits 21 and 23 was that applicant’s expert witness Travis Kator was not qualified to testify about the effectiveness of the proposed odor abatement management practices and whether the practices would generate odors in excess of accepted agricultural practices. The motion to strike will be denied because the hearing officer found the witness to be credible and qualified to testify concerning the effectiveness of the management practices.

The protestants in this matter do not believe the proposed dairy facility is in the local public interest, since operation of the facility will not make the existing odor situation in the general vicinity of the dairy “better.” Protestant Chisholm will not be satisfied with any proposal of the applicant, steadfastly maintaining that any additional dairy in Magic Valley has to be turned down because there are already too many dairy cattle in the area. The fact that the applicant is proposing measures that are not required and that are relatively innovative for Idaho does not change Chisholm’s position. In addition, Chisholm points to the “cumulative effect” of adding any cattle in an area where an alleged odor problem exists stating that it is not in the local public interest.

The protestants sought quantification of odor emissions for existing dairies and for the applicant’s proposed dairy. Since this type of information does not presently exist, the applicant obviously could not provide it. Evidence presented at the hearing showed that although rules have been promulgated in connection with the Agricultural Odor Management Act, the rules presently are being amended a second time with criteria to judge odor for agricultural operations in terms of intensity, duration, frequency and health risks. Since the rule making is not complete, the position taken by the protestants was that without some sort of base with which to compare reductions in odor omissions, whatever the applicant proposes is not acceptable.

The determination of whether the proposed odor control measures satisfy the local public interest is subjective and needs to include consideration of the effect of the dairy on the economy of the area, the effect on recreation, fish and wildlife resources, and compliance with applicable air, water and hazardous substance standards and compliance with planning and zoning ordinances of local and state jurisdictions. On balance, it does not seem reasonable that the applicant should be held responsible for an odor problem that was not of the applicant's making and over which the applicant has no control. It is reasonable to conclude that the applicant's implementation of management measures that have been used at some dairies in Idaho, and that are accepted as reasonable technology to provide odor control for the planned facility does meet the local public interest standard.

CONCLUSIONS OF LAW

1. Section 42-222, Idaho Code, provides in pertinent part as follows:

The director of the department of water resources shall examine all the evidence and available information and shall approve the change in whole, or in part, or upon conditions, provided no other water rights are injured thereby, the change does not constitute an enlargement in use of the original right, and the change is consistent with the conservation of water resources within the state of Idaho and is in the local public interest as defined in section 42-203A(5), Idaho Code.

2. The applicant carries the burden of coming forward with evidence that the proposed change will not injure other water right holders, that it will not constitute an enlargement of the use and will be consistent with principles of conservation of the water of the state of Idaho.

3. Both the applicant and the protestant have the responsibility of coming forward with evidence regarding matters of public interest of which they are each most cognizant.

4. The applicant has the ultimate burden of persuasion for all of the criteria of Section 42-222, Idaho Code.

5. The increase in nitrate concentration in the observation wells has not been specifically associated with any particular source. The observed concentrations are below the Maximum Contaminant Level for public drinking water established at 10 mg/l by the Environmental Protection Agency.

6. The proposed changes will not injure other water rights.

7. The proposed changes do not constitute an enlargement in use of the original right.

8. Gooding County has granted approval for the jurisdictional elements for operation of the dairy within its jurisdiction.

9. The proposed changes are consistent with the conservation of water resources within the state of Idaho.

10. Having evaluated and weighed the evidence and testimony relative to the applicant's proposed odor management methods and the local public interest, the proposed odor control measures for the dairy operation meet the local public interest standard.

11. The Department should approve the application with certain conditions.

ORDER

IT IS THEREFORE ORDERED that the motion to strike portions of Applicant's Exhibits 21 and 23 is **DENIED**.

IT IS FURTHER HEREBY ORDERED that Application for Transfer No. 5639 in the name of K & W Dairy is **APPROVED** subject to the following conditions:

1. The right holder shall design and construct the dairy facility in compliance with the requirements of the Idaho Department of Agriculture.
2. Prior to diversion and use of water under this approval, the right holder shall install and maintain a suitable measuring device on each diversion as determined by the Department. The right holder shall measure and shall annually report the amount of water diverted under this transfer to the water measurement district or to the Department.
3. The place of commercial use authorized by this transfer includes land upon which wastewater may be applied to satisfy water quality requirements. Water diverted under this approval shall not be land applied unless the water is first beneficially used for other purposes in the dairy as authorized by this transfer.
4. Ninety-eight and four tenths (98.4) acres located in the NE Section 32, T8S, R15E, B.M. are no longer authorized for irrigation with ground water under the rights being transferred.
5. The right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
6. Prior to use of water under this approval, the dairy operation shall comply with applicable county zoning ordinances.

7. Commercial use is for a dairy located in the NE Section 32, T8S, R15E, B.M.
8. Right 36-10225D is an expansion right pursuant to section 42-1426, Idaho Code.
9. Rights 36-02087D, 36-02113D, 36-02161D, 36-02289F, 36-02311D, 36-02500D, 36-02614D, 36-07307D, 36-07362D, 36-07477D, 36-07606D, 36-07779D, 36-07832D, 36-10225D and 36-15169D when combined shall not exceed a total instantaneous diversion of 1.92 cfs of water from all points of diversion under transfer 5639, nor a total combined annual volume of 295.2 AF for commercial and stockwater uses at the dairy.
10. Four (4) points of diversion are located within the SENE Section 32, T8S, R15E, B.M.
11. The right holder is not authorized to assign ownership of these rights to another party without prior approval of the Department.
12. Failure of the right holder to comply with the conditions of this transfer is cause for the Director to rescind approval of the transfer.

Signed this 1st day of August , 2003.

_____/Signed_____
L. GLEN SAXTON, P.E.
Hearing Officer